

CLAIMS:

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We claim:

- 1           1.    A method comprising:  
2           determining a first semantic sub-space within a semantic  
3           space in response to an input term; and  
4           displaying at least one document positioned with said first  
5           semantic sub-space if any documents are contained therein.
- 1           2.    A method according to claim 1 further wherein if  
2           said semantic sub-space contains no documents then determining an  
3           expanded semantic sub-space, said expanded semantic sub-space  
4           larger than said first semantic sub-space, said determining  
5           repeated until at least one document is contained therein.
- 1           3.    A method according to claim 2 wherein determining  
2           said expanded semantic sub-space includes increasing a radius of  
3           semantic distance about the meaning corresponding to the input  
4           term.
- 1           4.    A method according to claim 1 further wherein if no  
2           documents are contained in said first semantic sub-space then no  
3           documents are displayed.
- 1           5.    A method according to claim 1 further wherein if  
2           said semantic sub-space contains no documents then determining an  
3           expanded semantic sub-space, said expanded semantic sub-space  
4           larger than said first semantic sub-space, said determining

5 repeated until the one of the following occurs: at least one  
6 document is contained in the expanded semantic sub-space and the  
7 expanded semantic sub-space reaches a given threshold.

1           6. A method according to claim 1 wherein said  
2 documents are advertisements.

1           7. A method according to claim 6 wherein said  
2 advertisements are Internet banner ads.

1           8. A method according to claim 1 wherein said first  
2 semantic sub-space is redefined based upon further inputs of the  
3 particular meaning of said input term if said input term has more  
4 than one meaning in said semantic space.

1           9. A method according to claim 1 further comprising:  
2 indexing documents within said semantic space.

1           10. A method according to claim 7 wherein banner ads  
2 may be sold to an advertiser by an information portal based upon  
3 is desired position within semantic space.

1           11. A method according to claim 10 wherein said banner  
2 ads are displayed to a user of said information portal, said user  
3 providing the input term.

1           12. A method comprising:

2           determining the semantic distance and relationship between a  
3 purchased synset in a semantic space and an input term, said

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4 input triggering the retrieval of an ad purchased for a semantic  
5 sub-space about said semantic space;

6 determining the price of said retrieved ad based upon said  
7 determined distance and relationship.

1 13. A method according to claim 12 wherein the price  
2 of the retrieved ad is determined to be inversely  
3 proportional to the determined semantic distance.

1 14. A method comprising:  
2 inputting at least one term to a semantic engine;  
3 determining a first semantic sub-space within a  
4 semantic space in response to an input term; and  
5 retrieving all words and meanings contained within said  
6 semantic sub-space.

1 15. A method according to claim 14 further comprising:  
2 outputting said retrieved words and meanings.

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